

REMARKS

Applicant wishes to thank the examiner for the courtesy extended to the undersigned representative during the telephone interview that took place on December 14, 2010. During the interview, which was initiated by the undersigned, there was discussion regarding the features of claim 27 and the examiner's interpretation of the features of claim 27 as applied to the disclosure of Gulati. There was no agreement regarding possible amendment of the claims or allowability of the claims.

Applicant has shown how a self-supporting volume unit forming part of a tank can be constructed from mechanically extruded aluminum profile elements. Such profile elements can be made of essentially indeterminate length but transverse dimensions of a mechanically extruded aluminum profile element are restricted by the size of the extrusion die and may be only a few centimeters.

The independent claim 27 stands rejected under 35 USC 103 over Gulati in view of Bampton and McLaughlin. The examiner takes the position that Gulati discloses all the features of claim 27 except for use of friction welding to attach the first profile elements to each other and to attach the second profile elements to each other and the aluminum profile elements being formed by mechanical extrusion. Specifically, the examiner takes the position that Gulati discloses that a tank suitable for storing very cold cryogenic liquids may be manufactured by a method that comprises providing first aluminum profile elements each having a plane part and a stiffening part extending essentially perpendicular to the plane part and having a free distal end relative to the plane part, forming an intermediate element by attaching the first profile elements to each other at their plane parts by welding, providing second aluminum profile elements, forming a stiffener by attaching the second profile elements to each other by welding, and attaching the stiffener to the intermediate element to form a first plane element.

During the interview, the examiner suggested that the top walls of the tank sections 57 shown in FIG. 2 would constitute, respectively, the first aluminum profile elements called for by claim 27 and that the vertical walls might constitute, respectively,

the second aluminum profile elements. According to paragraph [0039] of Gulati, the tank 50 is 90 meters long, 40 meters wide and 30 meters high. Gulati does not disclose the length dimension of the tank sections 57 shown in FIG. 2 but it is apparent from the overall dimensions of the tank that each section 57 has a dimension, lengthwise of the tank, of 20 meters or more. Applicant submits that the prior art does not support the contention that the extrusion technique referred to by McLaughlin can be applied to fabrication of an object the size of the top wall of the tank section 57 shown by Gulati. Therefore, the top walls of the tank sections 57 are not apt counterparts for the first aluminum profile elements and the vertical walls are not apt counterparts for the second aluminum profile elements.

Gulati discloses that the tank 50 shown in FIG. 2 comprises an internal truss frame structure 52, a grillage of stiffeners and stringers attached to the truss frame structure (corresponding to the stiffeners 27 and stringers 28 shown in FIGS. 1C and 1D) and a thin plate cover 54 sealingly attached to the structural grillage. The examiner appears to consider the combination of the thin plate cover 54 of Gulati and the stiffeners and/or stringers constitute an apt counterpart for a first aluminum profile element as recited in claim 27. An aluminum profile element, as that term is understood by those skilled in the art, refers to an elongate element that is of uniform cross-sectional configuration. Thus, the stringers, which are notched to accommodate the stiffeners, cannot be considered to be part of a profile element that includes the plate cover 54. The combination of the plate cover 54 and stiffeners, as disclosed by Gulati, is not an apt counterpart for the first mechanically extruded aluminum profile element because Gulati discloses that the plate cover is provided as a separate component from the grillage and is attached to the periphery of the grillage, whereas a mechanically extruded aluminum profile element is a single unitary and integral body. Specifically, in the case of the first aluminum profile element having a plane part and a stiffener part, the stiffener part is attached to the plane part over the entire length of the profile element.

Claim 27 further requires that the first plane element should be attached to second, third and fourth plane elements to form respective sides of a volume unit defining an internal space and having a basic form corresponding to a rectangular prism having a first side opposite a third side and a second side opposite a fourth side. Thus, while the examiner has suggested that the top walls of the tank sections 57 disclosed by Gulati correspond to the first aluminum profile elements of claim 27 and the vertical walls correspond to the second aluminum profile elements of claim 27, the examiner has not identified any counterparts for the second, third and fourth plane elements of claim 27.

In view of the foregoing, applicant submits that the subject matter of claim 27 is not disclosed or suggested by Gulati, Bampton or McLoughlin, whether taken singly or in combination. Therefore, claim 27 is patentable and it follows that the dependent claims 28-39 also are patentable.

The argument presented above in support of claim 27 is applicable to claim 40. Therefore, claim 40 and the dependent claims 41-46 also are patentable. In addition, the arguments presented above in support of claim 27 are applicable to claim 47.

Respectfully submitted,

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